March 4, 2016

Bruce Wanstall
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Alaska Department of Environmental Conservation
410 Willoughby Ave, Suite 303
PO Box 111800
Juneau, AK 99811-1800

RE: Weekly Project Status Update Report, Wrangell Junkyard Site Cleanup

Mr. Wanstall,

NRC Alaska *and* ***NORTECH*** are pleased to provide the following Project Status update for the Wrangell Junkyard Cleanup Project. As we have discussed, our goal is to provide a status update on a weekly basis, with photos, maps and notes as appropriate so that all interested parties may remain apprised on progress in the field on a regular basis. We are currently performing work as detailed in the Interim Remedial Action Plan (IRAP) dated January 19, 2016 and approved February 12, 2016, and the Storm Water Pollution Prevention Plan (SWPPP) for the project as detailed under Alaska Pollutant Discharge Elimination System (APDES) permit #AKR10FG27. This Project Status Update covers the initial mobilization and site preparation activities as performed between February 20, 2016 and March 3, 2014.

Project Site Activities:

NRC Alaska's Project Manager Shane O'Neill and ***NORTECH*** personnel Jason Ginter, Ron Pratt, Jen Stoutamore and Susan Vogt mobilized to the site between February 19 and February 21, 2016. This team performed the initial site walkthrough to familiarize all parties with the approved plans and anticipated project sequencing. Special attention was paid to SWPPP requirements and areas that were to be addressed by SWPPP Best Management Practices. For discussion convenience, we have divided the project site in to four areas based on location, see attached.

February 22:

- Project property boundaries located by R&M surveyors and ***NORTECH***
- Remainder of NRC Alaska crew arrives in Wrangell, site orientation

February 23:

- Project team review of Health and Safety Plan
- Project team review of IRAP phase tasks Job Hazard Analysis
- Unloading and staging of project supplies

February 24:

- Project SWPPP elements installed at lower portion of the project area
- Surface debris consolidation from lower project area (Area A)
- Tree cutting within project area

February 25:

- Continue installation of SWPPP elements in Area A
- Continue site surface debris consolidation
- Drum identification and removal and empty drums

February 26:

- ***NRC Alaska*** crew off day
- ***NORTECH*** crew SWPPP inspection and initial site grid layout

February 27:

- Begin clearing contaminated material from lower portion of Area A

February 28:

- Continue removal of contaminated material from Area A until clean bottom reached along access road area, as verified via field screening
- Lead plates and battery debris removed from Area D and stockpiled
- SWPPP measures reinforced

February 29:

- Continue removal of contaminated material from Area A access road zone
- Build access road using six inch shot rock over geotextile once bottom is sampled and verified clean via field screening
- Battery and lead debris removal from Area D
- Tree and large vegetation removal from Area D

March 1:

- Continue removal of contaminated materials from access road area and road construction
- Continued field screening and sampling of site material being excavated so that access road is constructed on clean material
- Placement of additional SWPPP BMP elements at internal locations

March 2:

- Continue access road construction and debris removal
- Sampling and field screening of access road bed and debris stockpile

March 3:

- ***NRC Alaska*** crew off day
- On-site meeting and walk through with ***NRC Alaska***, ***NORTECH*** and ADEC project managers, and City of Wrangell Public Works Director.
- ***NORTECH*** crew site mapping and SWPPP inspection

Project activities accomplished:

- Project Site surveyed and overall site grid established
- Surface debris removal and stockpiled
- Surface batteries and lead debris removed and stockpiled
    - Roughly 15 cubic yards of batteries and battery debris has been stockpiled
- Drum contents identified, empty drums removed to debris stockpile
- Initial SWPPP elements installed

- Access road area excavated to clean bottom as verified via field screening using the NITON XRF
- Access road constructed through Area A using six inch shot rock over geotextile
- Access road will be used to stockpile removed contaminated materials from Area A into a stockpile on Areas C&D as described in the IRAP
- Submittal of soil samples for laboratory analysis to fine tune NITON XRF correlation and closure
- After meeting with ADEC and the City of Wrangell Director of Public Works, an agreement was reached to burn woody debris from the site on the nearby Wrangell Institute property to reduce the amount of overall debris. Details will be included in the Corrective Action Plan.
- Establishment of Jason Ginter, ***NORTECH*** project manager as the primary point of contact for project remediation operations with ADEC.

Project challenges encountered:

- Metal, plastic and woody debris is present throughout the site soils from the surface to the glacial till (locally referred to as “blue clay” or “hardpan”) layer, ranging from 18 to 60 inches below the site ground surface, averaging a little over three feet.
    - Roughly 650-700 cubic yards of surface and excavation area debris has been removed and stockpiled so far
- Debris encountered has included buried chain link fencing; tires; batteries, both intact and broken; automotive engines and body pieces; stacks of automotive rims welded together; piping; cables; and two compressed gas cylinders, one empty and one full. The full cylinder contained nitrogen gas and was vented on site.
- The lead contaminated soils are deeper into the site soils than anticipated.
- NITON XRF readings are consistently above the established screening levels within the soils above the blue clay layer.
    - Brown muddy debris laden soil readings range from 56 – 1004 ppm lead on the NITON
    - Blue clay layer readings have ranged from 8 -38 ppm lead on the NITON
- At the lower end of Area A, four concrete pads were found, each separated by about an 18 inch gap.
    - Within the gaps were located steel piping with drainage slits cut into them. The pipes were filled with petroleum contaminated fines, and the soils in this area were visually petroleum contaminated.
    - This material has been stockpiled separately and covered while we await laboratory data.
    - Roughly 120-150 cubic yards of petroleum contaminated material is stockpiled separately
- Lead contaminated material extends off the subject property onto three of the adjoining landowners’ property.
    - Permission has been granted to remediate as necessary on the Byford property to the north of the subject area, and the Goodwin property to the south.

- A cache of petroleum drums and an acid drum, as well as a lead battery burn pile are located on the Alaska Mental Health Trust Land Office property uphill of the project area.
- ADEC is working to gain permission from the Trust Land Office to access the area.

Anticipated Project activities for the next week:

- Submittal of a draft Corrective Action Plan (CAP).
- Removal of contaminated soils and debris from Area A as discussed in the IRAP. Materials will be stockpiled on Areas C&D.
- Field screening, correlation and clearance sampling of contaminated soil removal areas during soils removal.
- Installation of additional SWPPP measures as needed.
- Construction of a rock pad for placement of the Water Treatment System within Area A.
- Installation of Water Treatment System.

We trust this information is adequate to meet your needs. If you have any questions, please feel free to contact ***NRC Alaska*** or ***NORTECH*** at your convenience.

Sincerely,

NORTECH

Jason Ginter, PMP
Principal, Juneau Technical Manager

NRC Alaska

Ian Combs
Operations Manager

Attachments: Site Progress Photos
Site Area Map
Field Screening Map and Grid Locations
Niton Results Table

Photo 1: *Installing silt fence at lower portion of Project Area in accordance with SWPPP*

Photo 2: *Installing silt dike along Project property boundary above Byford residence*

Photo 3: *Installing silt dike along southern edge of project area*

Photo 4: *Project area surface debris*

Photo 5: *Project area surface debris*

Photo 6: *Project area debris stockpile*

Photo 7: *Broken batteries and lead plates located on surface within Project Area*

Photo 8: *NRC personnel hand removing lead plates and battery surface debris*

Photo 9: *Beginning excavation of contaminated material at lower end of project area*

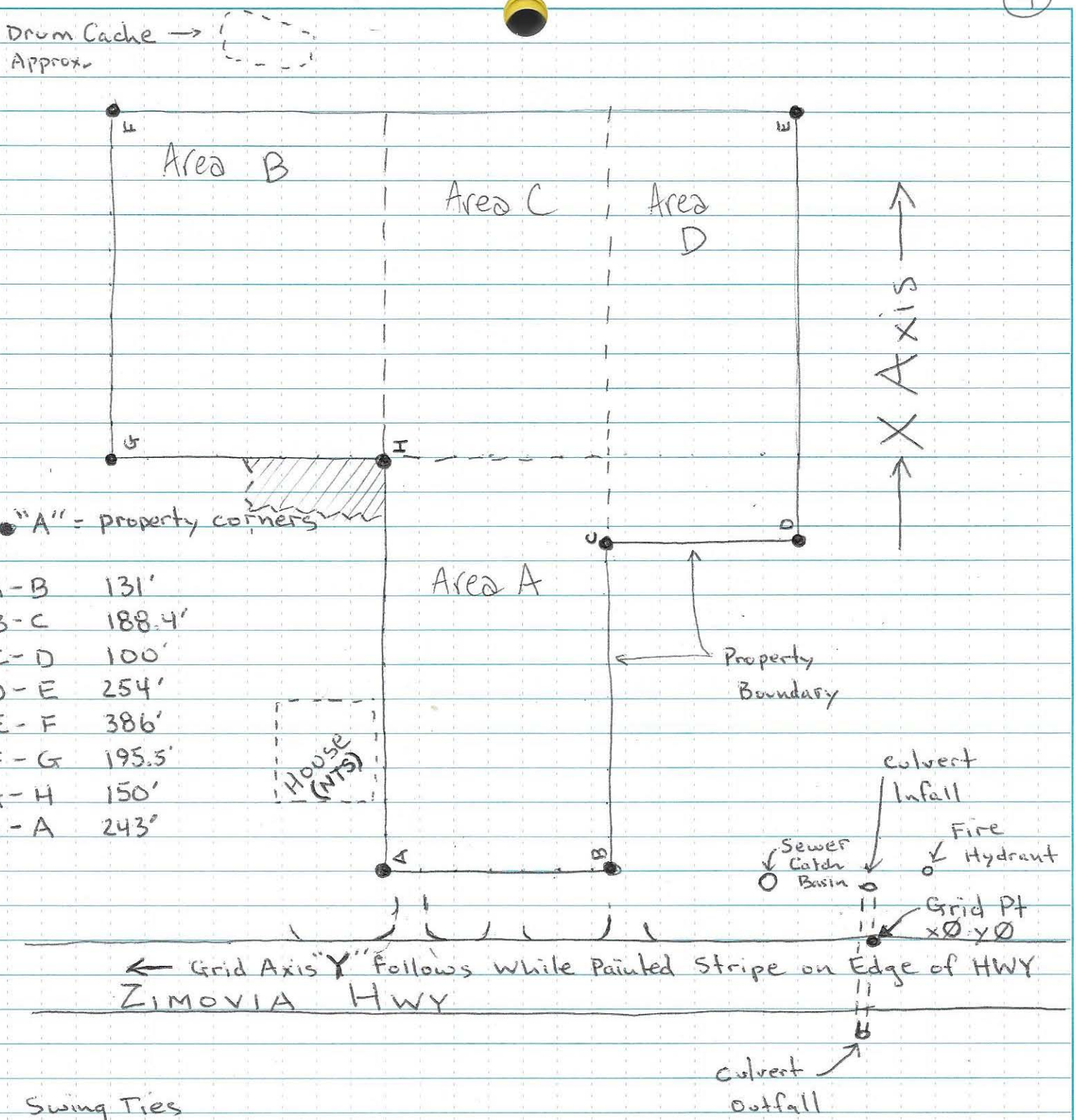
Photo 10: *Concrete slabs, with POL contaminants between slabs. Lower portion of project area*

Photo 11: *POL contaminated material located lower project area.*

Photo 12: *Excavating lead contaminated material from lower project area, note amount of debris present.*

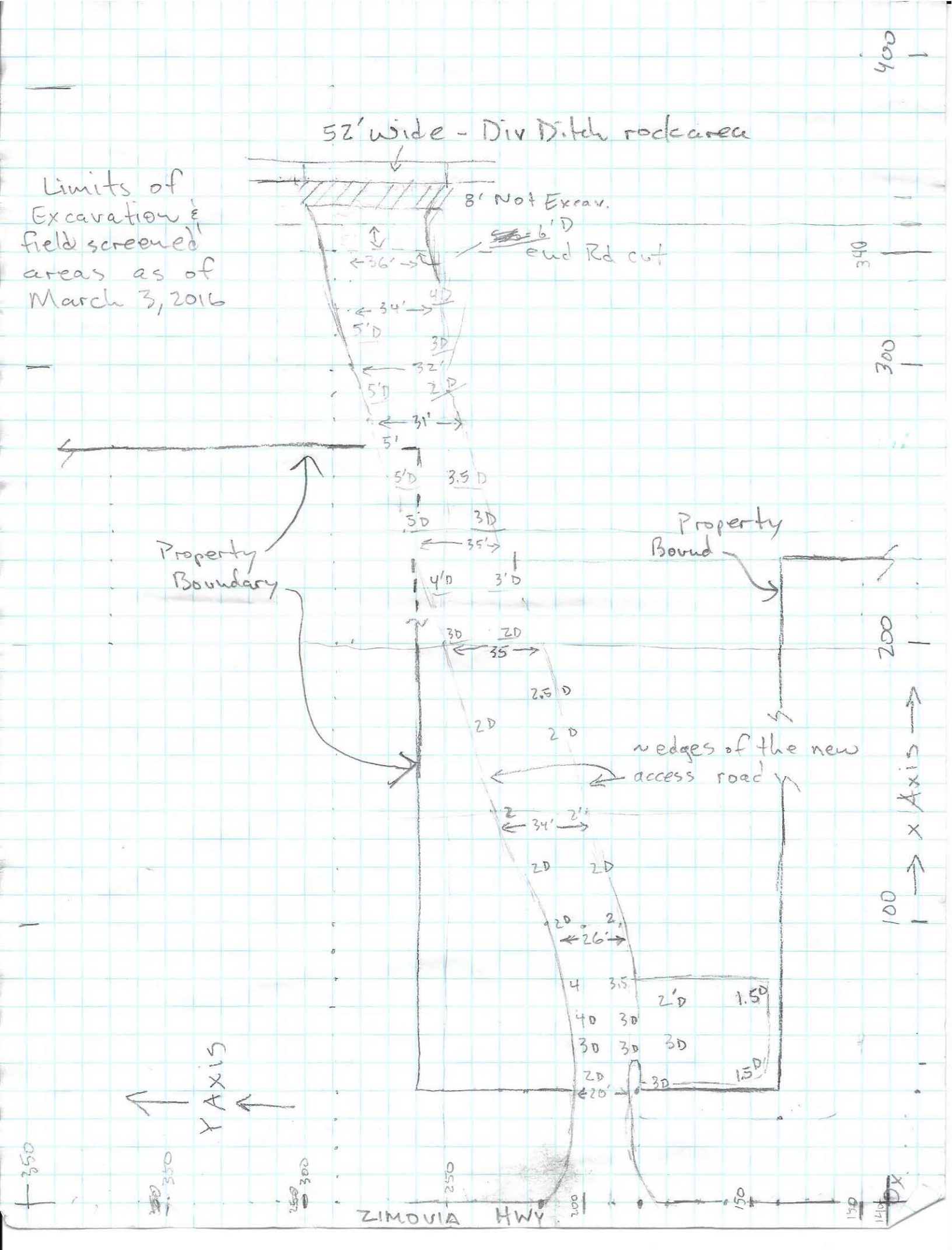
Photo 13: *Intact compressed gas cylinder found buried amongst debris while removing contaminated materials*

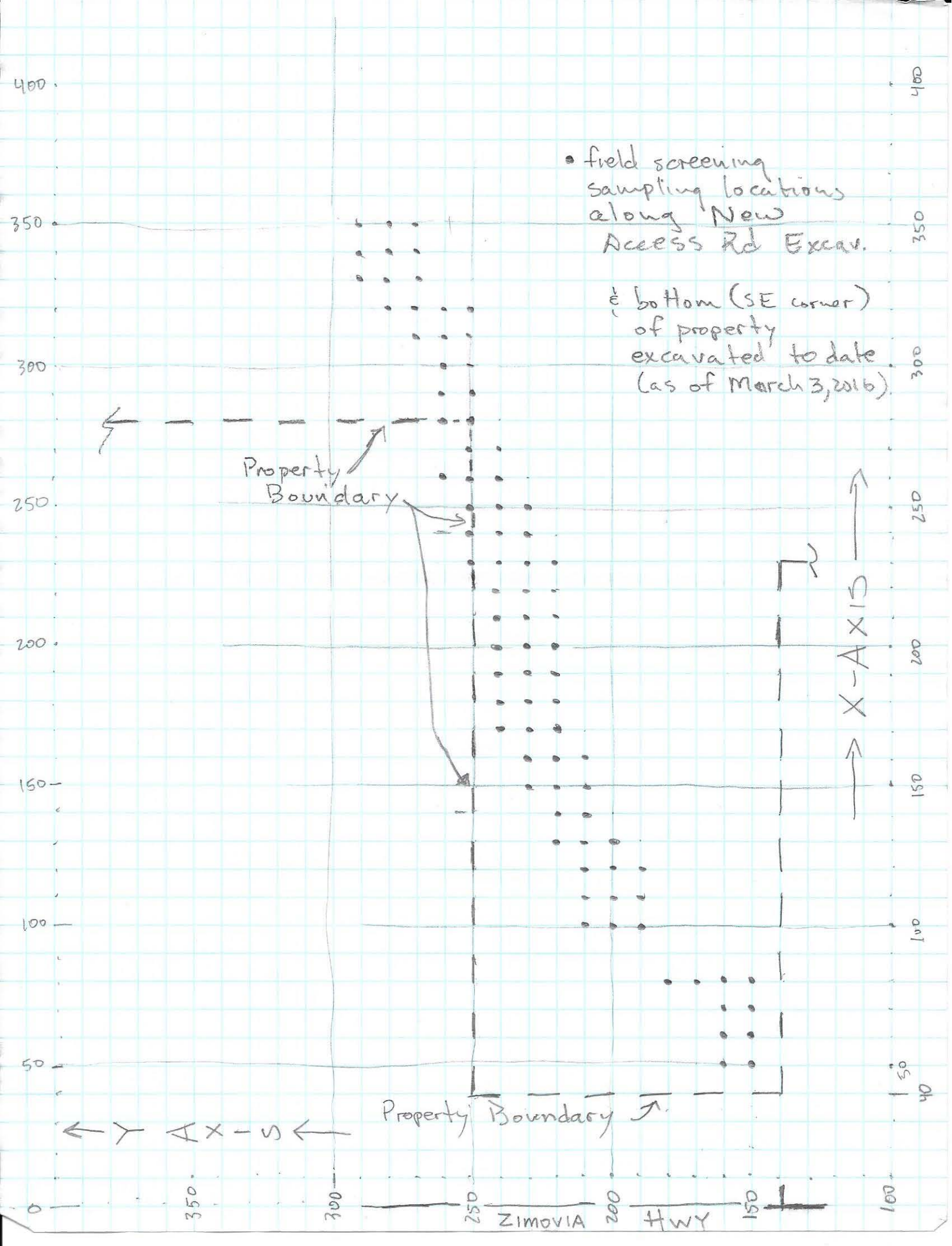
Photo 14: *Access road constructed over clean material within project area.*



Swing Ties

Dist	Loc	to	Loc
35'	0,0	to	top center fire hydrant
27'	0,0	to	nearest culvert infall
48'	0,0	to	nearest culvert outfall
56.5'	0,0	to	center of lid - Sewer Catch Basin


52' wide - Div Ditch rock area
Limits of Excavation & field screened areas as of March 3, 2016
8' Not Exav.
6'D
end Rd cut
36'
34'
4D
5'D
3D
32'
5'D
2D
31'
5'
5'D
3.5 D
5'D
3D
35'
Property Boundary
Property Bound
4'D
3'D
3D
2D
35
2.5 D
2D
2 D
edges of the new access road
2
34'
2'
2D
2D
2D
2'
26'
4
3.5
2'D
1.5D
4D
3D
3D
3D
3D
2D
20'
3D
1.5D
Y AXIS
X Axis
400
340
300
200
100
350
350
300
250
200
150
ZIMOVIA HWY


400
350
300
250
200
150
100
50
0
• field screening sampling locations along New Access Rd Excav.
bottom (SE corner) of property excavated to date (as of March 3, 2016)
Property Boundary
Property Boundary
Y-AXIS
X-AXIS
350
300
250
200
150
100
50
ZIMOVIA
HWY

Sample Date	Sample ID	NITON ID	Pb reading	Pb reading	Pb reading	Highest	Average	Notes
2/22/2016	Test 1-S	243, 244, 245	339.6	366.0	383.3	383.3	363.0	
2/22/2016	Test 1-6	247, 248, 249	279.6	367.5	279.3	367.5	308.8	
2/22/2016	Test 1-12	251, 252, 253	210.2	197.5	207.9	210.2	205.2	
2/22/2016	Test 2-S	254, 255, 256	42.9	31.4	36.7	42.9	37.0	
2/22/2016	Test 2-6	257, 258, 259	54.4	52.6	36.0	54.4	47.7	
2/22/2016	Test 2-12	260, 261, 262	14.4	48.8	32.3	48.8	31.8	
2/22/2016	Test 3-S	263, 264, 265	<LOD	<LOD	<LOD	<LOD	#DIV/0!	
2/22/2016	Test 3-6	266, 267, 268	<LOD	<LOD	<LOD	<LOD	#DIV/0!	
2/22/2016	Test 3-12	269, 270, 271	15.7	<LOD	<LOD	15.7	15.7	
2/22/2016	Test 4-S	272, 273, 274	43.0	37.6	62.2	62.2	47.6	
2/22/2016	Test 4-6	275, 276, 278	202.4	158.6	168.5	202.4	176.5	
2/22/2016	Test 4-12	280, 282, 283	17.5	26.2	81.2	81.2	41.6	
2/22/2016	Test 5-S	284, 285, 286	98.1	138.9	122.9	138.9	120.0	
2/22/2016	Test 5-6	287, 289, 290	67.0	82.6	78.9	82.6	76.2	
2/22/2016	Test 5-12	291,292,293	48.0	53.2	46.7	53.2	49.3	
2/22/2016	Test 6-S	294, 295, 296	22.7	24.7	24.3	24.7	23.9	
2/22/2016	Test 6-6	297, 298, 299	10.9	12.0	11.9	12.0	11.6	
2/22/2016	Test 6-12	301, 302, 303	15.1	15.0	13.1	15.1	14.4	
2/22/2016	Test 7-S	304, 305, 306	36.2	82.8	37.9	82.8	52.3	
2/22/2016	Test 7-6	307, 308, 309	46.5	44.1	40.0	46.5	43.5	
2/22/2016	Test 7-12	310, 311, 313	42.0	37.0	51.6	51.6	43.5	
2/22/2016	Test 8-S	314, 315, 316	18.7	9.5	14.2	18.7	14.1	
2/22/2016	Test 8-6	317, 318, 319	<LOD	<LOD	<LOD	<LOD	<LOD	
2/22/2016	Test 8-12	320, 321, 323	10.8	<LOD	10.2	10.8	10.5	
2/22/2016	Test 9-S	324, 325, 326	<LOD	<LOD	<LOD	<LOD	<LOD	
2/22/2016	Test 9-6	329, 330, 331	<LOD	<LOD	45.5	45.5	45.5	All 2/22/2016 samples taken from
2/22/2016	Test 9-12	332, 333, 334	24.0	<LOD	<LOD	24.0	24.0	area directly behind Byford garage
2/23/2016	Test 10-S	335, 336, 337	890.3	913.8	1028.0	1028.0	944.0	
2/23/2016	Test 10-12	338, 339, 340	1353.0	1067.0	1249.0	1353.0	1223.0	
2/23/2016	Test 11-S	341, 342, 343	471.9	539.0	525.9	539.0	512.3	2/23/2016 samples taken from berm
2/23/2016	Test 11-12	345, 346, 347	569.3	702.7	541.6	702.7	604.5	on property line by southern drainage
2/26/2016	Test 12	349, 351, 352	303.2	346.6	407.2	407.2	352.3	comp. debris pile soil
2/27/2016	X50Y170	355, 356, 357	21.3	13.0	9.8	21.3	14.7	field screening results for post-ex

2/27/2016	X50Y180	359, 360, 361	9.8	8.5	10.7	10.7	9.7
2/27/2016	X80Y190	362, 363, 364	11.9	9.7	15.5	15.5	12.4
2/27/2016	X80Y200	365, 366, 367	8.5	11.2	8.6	11.2	9.4
2/27/2016	X90Y190	368, 369, 370	8.8	9.3	8.9	9.3	9.0
2/27/2016	X90Y200	371, 372, 373	9.5	9.1	9.3	9.3	9.3
2/28/2016	X50Y150	375, 376, 377	8.5	9.2	8.6	9.2	8.8
2/28/2016	X60Y150	378, 379, 380	10.4	8.2	9.2	10.4	9.3
2/28/2016	X70Y150	381, 382, 384	9.1	18.1	9.8	18.1	12.3
2/28/2016	X80Y150	385, 386, 387	9.2	9.6	7.8	9.6	8.9
2/28/2016	X50Y160	388, 389, 390	9.0	11.0	9.3	11.0	9.8
2/28/2016	X60Y160	391, 393, 394	10.9	9.3	8.3	10.9	9.5
2/28/2016	X70Y160	395, 396, 397	9.2	8.7	8.5	9.2	8.8
2/28/2016	X80Y160	398, 399, 400	9	9.6	9.2	9.6	9.4
2/28/2016	X80Y170	401, 402, 403	8.5	12.3	9.5	12.3	10.1
2/28/2016	X80Y180	404, 405, 406	9.0	8.8	9.0	9.0	8.9
2/28/2016	X100Y190	407, 408, 409	9.1	9.1	8.5	9.1	8.9
2/28/2016	X100Y200	410,412, 413	10.1	9.9	9.8	10.1	9.9
2/28/2016	X100Y210	414, 415, 416	30.0	28.2	31.4	31.4	29.9
2/28/2016	X110Y190	417, 418, 419	11.6	9.0	8.6	11.6	9.7
2/28/2016	X110Y200	423, 424, 425	10.2	8.7	8.4	10.2	9.1
2/28/2016	X110Y210	426,427, 428	9.2	11.6	8.8	11.6	9.9
2/28/2016	X120Y190	430, 431, 432	16.2	9.3	9.5	16.2	11.7
2/28/2016	X120Y200	435, 436, 437	8.1	9.5	8.3	9.5	8.6
2/28/2016	X120Y210	439, 440, 441	10.0	9.8	9.7	10.0	9.8
2/28/2016	X130Y200	442, 443, 444	8.4	9.3	9.5	9.5	9.1
2/28/2016	X130Y210	446, 447, 448	9.3	9.6	9.8	9.8	9.6
2/28/2016	X130Y220	449, 451, 453	12.4	9.8	11.6	12.4	11.3
2/28/2016	X140Y210	454,457,458	8.6	9.4	8.9	9.4	9.0
2/28/2016	X140Y220	459, 460, 461	9.7	8.5	7.2	9.7	8.5
2/28/2016	X150Y210	462,463, 464	11.3	9.1	7.6	11.3	9.3
2/28/2016	X150Y220	465, 466, 467	146.2	455.5	402.0	455.5	334.6
2/28/2016	X150Y230	468, 469, 470	8.0	8.9	9.2	9.2	8.7
2/28/2016	X160Y210	476, 477, 478	8.0	9.1	8.7	9.1	8.6
2/28/2016	X160Y220	471, 474, 475	8.6	8.2	8.4	8.6	8.4

2/28/2016	X160Y230	479, 480	56.7	83.8		83.8	70.3	
2/28/2016	X150Y220B	481, 482, 483	8.4	8.6	9.6	9.6	8.9	Same location as X150Y220, but deeper
2/28/2016	X160Y230B	484, 485, 486	8.4	8.7	9.2	9.2	8.8	Same location as X160Y230, but deeper
2/29/2016	X170Y220A	491, 492, 493	48.5	50.6	73.2	73.2	57.4	Approximately 18 inch depth
2/29/2016	X170Y230A	496, 498, 501	134.2	66.0	57.5	134.2	85.9	Approximately 24 inch depth
2/29/2016	X170Y240A	504, 507	53.9	44.7	69.2	69.2	55.9	Approximately 24 inch depth
2/29/2016	X170Y220B	510,512,513	9.4	7.6	8.8	9.4	8.6	Approximately 30-36 inch depth
2/29/2016	X170Y230B	514,515,516	8.4	9.4	8.6	9.4	8.8	
2/29/2016	X170Y240B	517, 518, 520	9.1	9.3	8.6	9.3	9.0	
2/29/2016	X180Y220	521, 522, 523	9.3	9.3	8.6	9.3	9.1	
2/29/2016	X180Y230	524, 525, 526	9.2	8.0	9.1	9.2	8.8	
2/29/2016	X180Y240	527, 528, 530	9.0	7.3	12.2	12.2	9.5	
2/29/2016	X190Y240	527, 528, 530	9.0	7.3	12.2	12.2	9.5	
2/29/2016	X190Y220	531, 532, 533	8.8	8.4	8.5	8.8	8.6	
2/29/2016	X190Y230	534, 535, 536	7.9	8.4	8.2	8.4	8.2	
2/29/2016	X190Y240	537, 538, 539	9.2	8.4	8.3	9.2	8.6	
2/29/2016	X200Y220	540, 541, 542	8.4	9.9	8.7	9.9	9.0	
2/29/2016	X200Y230	543, 544, 545	8.7	9.7	9.3	9.7	9.2	
2/29/2016	X200Y240	547, 548, 549	11.5	8.6	8.3	11.5	9.5	
2/29/2016	X210Y220	550, 551, 552	8.1	14.0	8.0	14.0	10.0	Approximately 2 feet deep
2/29/2016	X210Y230	553, 554, 555	9.4	20.4	10.0	20.4	13.3	Approximately 2.5 feet deep
2/29/2016	X210Y240	556, 557, 558	10.4	8.9	8.5	10.4	9.3	Approximately 3.0 feet deep
3/1/2016	X220Y220	560, 561, 563	10.6	9.4	8.6	10.6	9.5	
3/1/2016	X220Y230	564, 565, 566	9.6	9.3	8.0	9.6	9.0	
3/1/2016	X220Y240	568, 569, 572	7.8	8.7	9.2	9.2	8.6	
3/1/2016	X230Y220	573, 574, 575	13.4	11.4	8.6	13.4	11.1	
3/1/2016	X230Y230	576, 577, 578	8.1	11.1	9.2	11.1	9.5	
3/1/2016	X230Y240	579, 580, 581	8.9	9.2	8.0	9.2	8.7	
3/1/2016	X230Y250	582, 583, 584	8.5	8.0	8.4	8.5	8.3	
3/1/2016	X240Y230	585, 586, 587	8.7	8.9	9.8	9.8	9.1	
3/1/2016	X240Y240	588, 589, 590	9.0	9.4	8.4	9.4	8.9	
3/1/2016	X240Y250	591, 592, 593	28.2	38.9	47.1	47.1	38.1	
3/1/2016	X250Y230	597, 598, 600	9.5	8.2	9.3	9.5	9.0	
3/1/2016	X250Y240	601, 602, 603	8.6	8.7	8.1	8.7	8.5	

3/1/2016	X250Y250	594, 595, 596	9.0	9.2	8.8	9.2	9.0	
3/1/2016	X260Y240	604, 605, 606	9.2	9.7	8.3	9.7	9.1	
3/1/2016	X260Y250	607, 609, 610	9.4	9.6	8.5	9.6	9.2	
3/1/2016	X260Y260	611, 612, 613	10.0	10.2	9.6	10.2	9.9	
3/1/2016	X270Y240	614, 615, 616	9.5	9.6	7.5	9.6	8.9	
3/1/2016	X270Y250	617, 618, 619	9.2	17.5	8.9	17.5	11.9	
3/1/2016	X240Y250B	621, 622, 623	8.1	8.8	9.0	9.0	8.6	Greater depth than original sample
3/2/2016	X280Y250	626, 627, 628	9.2	8.6	9.2	9.2	9.0	
3/2/2016	X280Y260	629, 630, 633	7.9	12.3	9.6	12.3	9.9	
3/2/2016	X290Y250	634, 635, 636	8.4	9.7	8.5	9.7	8.9	
3/2/2016	X290Y260	637, 638, 639	8.0	8.3	8.7	8.7	8.3	
3/2/2016	X300Y250	641, 642, 643	8.0	8.1	8.2	8.2	8.1	
3/2/2016	X300Y260	644, 645, 646	7.8	8.0	8.6	8.6	8.1	
3/2/2016	X310Y250	647, 648, 649	8.1	8.6	9.1	9.1	8.6	
3/2/2016	X310Y260	650, 651, 652	8.8	7.9	8.6	8.8	8.4	
3/2/2016	X310Y270	653, 654, 655	9.0	8.2	8.4	9.0	8.5	
3/2/2016	X320Y250-1	658	423.5			423.5	423.5	1 foot depth
3/2/2016	X320Y260-2	660, 661	68.4	603.5		603.5	336.0	2 foot depth
3/2/2016	X320Y270-2	569	1004.0			1004.0	1004.0	2 foot depth
3/2/2016	X330Y250-1	662	168.3			168.3	168.3	1 foot depth
3/2/2016	X330Y260-1	663	127.8			127.8	127.8	1 foot depth
3/2/2016	X330Y270-1	664	292.6			292.6	292.6	1 foot depth
3/2/2016	X330Y280-1	665	192.4			192.4	192.4	1 foot depth
3/2/2016	X320Y270	666, 667, 668	8.9	9.2	9.7	9.7	9.3	
3/2/2016	X320Y280	669, 671, 672	9.2	8.9	9.1	9.2	9.1	
3/2/2016	X330Y270	673, 674, 675	8.0	9.0	9.2	9.2	8.7	
3/2/2016	X330Y280	676, 677, 678	8.4	8.6	9.1	9.1	8.7	
3/2/2016	X330Y290	679, 680, 681	8.5	8.6	9.4	9.4	8.8	
3/2/2016	X340Y270	682, 683, 684	8.9	8.2	8.9	8.9	8.7	
3/2/2016	X340Y280	685, 686, 687, 688	7.9	9.7	8.3	9.7	8.6	
3/2/2016	X340Y290	689, 690, 691	8.9	9.7	8.4	9.7	9.0	
3/2/2016	X350Y270	692, 694, 695	9.1	9.0	10.7	10.7	9.6	
3/2/2016	X350Y280	969, 697, 698	9.1	9.4	9.4	9.4	9.3	
3/2/2016	X350Y290	699, 700, 701	8.9	9.0	8.8	9.0	8.9	